

By Express Mail # EV601220843US · December 20, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

Claims 1-8 (cancelled)

Claim 9 (new): Apparatus for opening and closing a door leaf, the apparatus comprising:

a housing made of polyoxymethylene plastic, the housing having a recess;

a piston made of polyoxymethylene plastic, the piston having a toothed rack and being arranged for movement in the recess;

a closing shaft comprising a pinion which engages the rack to drive the piston in the recess; and

a closing spring arranged in the recess acting on the piston oppositely to the closing shaft.

Claim 10 (new): The apparatus of claim 9 wherein the piston and the housing are injection molded.

Claim 11 (new): The apparatus of claim 9 wherein the rack is made of metal and is embedded in the piston by molding the plastic around the rack.

Claim 12 (new): The apparatus of claim 9 wherein the housing is fitted with bearing shells which support the closing shaft, the bearing shells being made of polyoxymethylene plastic.

Claim 13 (new): The apparatus of claim 12 wherein the bearing shells are press fit into the housing and welded to the housing by ultrasonic welding.

Claim 14 (new): The apparatus of claim 9 wherein the recess has an open end which is sealed by an end plug, the end plug being made of polyoxymethylene plastic.

Claim 15 (new): The apparatus of claim 14 wherein the end plug is pressed into the housing and welded to the housing by ultrasonic welding.

Claim 16 (new): The apparatus of claim 9 further comprising hydraulic bores in the housing, the bores having outlets which are sealed by plugs made of polyoxymethylene plastic.

Claim 17 (new): A method of making an apparatus for opening and closing a door leaf, the method comprising:

- injection molding a housing of polyoxymethylene plastic, the housing having a recess with a closed end and an open end;

- injection molding a piston of polyoxymethylene plastic, the piston having a toothed rack and being arranged for movement in the recess;

- seating a spring in the closed end of the recess;

- inserting the piston into the recess against the spring;

- providing a closing shaft comprising a pinion which engages the rack to drive the piston in the recess; and

- sealing the open end of the recess with an end plug.

Claim 18 (new): The method of claim 17 wherein the end plug is made of polyoxymethylene plastic which is press fit into the open end of the recess and ultrasonically welded to the housing.

Claim 19 (new): The method of claim 17 wherein the toothed rack is made of metal and is embedded in the piston by injection molding the plastic around the rack.

Claim 20 (new): The method of claim 17 wherein the housing is provided with bearing shells of polyoxymethylene plastic which are embedded in the housing in a press fit and welded to the housing by ultrasonic welding.

Claim 21 (new): The method of claim 17 wherein the housing is molded with hydraulic passages having open ends which are sealed with plugs made of polyoxymethylene plastic.